# Flood News for Michigan Floodplain Managers



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# FLOOD HAZARD MAPPING FREQUENTLY ASKED QUESTIONS

(The following is taken from the Federal Emergency Management Agency's website at <a href="https://www.fema.gov/mit/mapfag.htm">www.fema.gov/mit/mapfag.htm</a>)

# What input does the local community have to the flood hazard assessment?

Before the flood hazard assessment is initiated, the Federal Emergency Management Agency (FEMA) considers all existing information for use in the study. Public meetings may be conducted at which interested parties may present relevant facts to help ensure accurate results. The FEMA also works closely with each community's officials before and during the study to describe the technical procedures and to obtain community input before publication of the Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM). Before the FIS is initiated, community officials, FEMA representatives, and the study contractor meet to discuss the areas that need to be studied. This is called the time and cost estimate meeting.

# How are flood hazard areas and flood levels determined?

Flood hazard areas are determined using statistical analysis of records of river flow, storm tides, and rainfall; information obtained through consultation with the community; floodplain topographic surveys; and hydrologic and hydraulic analyses. The detailed FIS covers those areas that are subject to flooding from rivers and streams, along coastal areas and lake shores, or in shallow flooding areas.

#### What are flood hazard zones and what do they mean?

The FIRM is used in regular program communities by lenders to determine the flood insurance requirements and by insurance agents to determine flood insurance premium rates for specific properties. The map includes areas within the 100-year flood boundary, which are termed "Special Flood Hazard Areas" (SFHAs). A 100-year flood does not refer to a flood that occurs every 100 years, but refers to a flood level with a one percent or greater chance of being equaled or exceeded in any given year.

The SFHAs may be further subdivided into insurance risk rate zones. Areas between the 100-year and 500-year flood boundaries are termed "moderate flood hazard areas." The remaining areas are above the 500-year flood level and are termed "minimal flood hazard areas."

Historically, about one-third of the claims paid by the National Flood Insurance Program (NFIP) are for flood damage in areas identified as having only "moderate" and "minimal" risk of flood. Flooding in these areas often is the result of inadequate local drainage systems, and such flooding sources with small drainage areas are generally not identified on the FIRMs.

The SFHAs are subdivided into flood hazard zones (insurance risk rate zones) according to the following criteria:

- Zone V: SFHAs along coasts subject to inundation by the 100-year flood with the additional hazards associated with storm waves. (Zone VE is used on new and some revised maps in place of Zones V1-30).
- Zone A: SFHAs subject to inundation by the 100-year flood. Because detailed hydraulic analyses have not been performed, no base flood elevations or depths are shown. Mandatory flood insurance purchase requirements apply.
- Zones AE and A1-30: SFHAs subject to inundation by the 100-year flood determined in a FIS by detailed methods. Base flood elevations are shown within these zones. Mandatory flood insurance purchase requirements apply. (Zone AE is used on new and some revised maps in place of Zone A1-30).
- Zone AH: SFHAs subject to inundation by the 100-year shallow flooding (usually areas of ponding)
  where average depths are between one and three feet. Base flood elevations derived from detailed
  hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements apply.
- Zone AO: SFHAs subject to inundation by types of 100-year shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analysis requirements apply.
- Zone A99: SFHAs subject to inundation by the 100-year flood which will be protected by a federal flood protection system when construction has reached specified statutory progress toward completion. No base flood elevations or depths are shown. Mandatory flood insurance purchase requirements apply.
- Zones B, C, and X: These areas have been identified in the community FIS as areas of moderate or minimal hazard from the principal source of flood in the areas. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in the community's FIS. The failure of a local drainage system creates areas of high flood risk within these rate zones. Flood insurance is available in participating communities but is not required by regulation in these zones. (Zone X is used on new and some revised maps in place of Zones B and C.)
- Zone D: Unstudied areas where flood hazards are undetermined but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

# What is a floodway and who designates it?

The floodway includes the channel of a river and the adjacent floodplain that must be reserved in an unobstructed condition in order to discharge the base flood without increasing flood levels by more than one foot. Some state standards specify smaller allowable increases. In Michigan, the allowable increase is a tenth of a foot. The FEMA requires the community to designate a floodway to avoid the possibility of significantly increasing upstream flood elevations. A community must prohibit development within the designated floodway that would cause any additional rise in base flood elevations. Also, in Michigan, residential construction is prohibited in a floodway.

### If a flood map is believed to be incorrect, what can be done to change it?

Three procedures have been established for changing or correcting a flood map. They are: Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and physical map revision.

#### What is a LOMA?

A LOMA is the result of an administrative procedure in which the FEMA reviews scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA.

A LOMA amends the currently effective FEMA map and establishes that a property is not located in an SFHA.

Although the FEMA may issue a LOMA, it is the lending institution's prerogative to require flood insurance as a condition of its own beyond the provisions of the Flood Disaster Protection Act of 1973 before granting a loan or mortgage. Those seeking a LOMA should first confer with the affected lending institution to determine whether the institution will waive the requirement for flood insurance if a LOMA is issued.

#### What comprises technical or scientific data?

In general, the scientific or technical data needed to effect a map amendment include certified topographic data and/or hydrologic and hydraulic analyses to support the request for amendment or revision.

#### What is a LOMR?

A LOMR is an official amendment to the currently effective FEMA map. It is used to change flood zones, flood delineations, flood elevations, and planimetric features. All requests for LOMRs must be made to the FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. A LOMR is usually followed by a physical map revision.

#### What is a conditional map revision?

Communities, developers, and property owners often undertake improvement projects intended to reduce the flood hazard in their communities and usually want FEMA maps to recognize the effects of these projects. Similarly, property owners and developers who intend to place structures in the 100-year floodplain usually must demonstrate to lending institutions and local officials that these structures will be above base flood elevation. Those who are planning such actions may submit design plans and other engineering data to the FEMA and request that the FEMA evaluate them. The response to such requests describes the changes that may eventually be made to the effective flood map and are called "conditional letters of map revision."

The Federal Insurance Agency charges a fee to defray the costs associated with reviewing the impacts of proposed projects on mapped floodplain elevations. Information on these fees may be obtained from the appropriate FEMA Regional Office.

### What is a physical map revision?

A physical map revision is an official republication of a map to effect changes to flood insurance zones, floodplain delineations, flood elevations, floodways, and planimetric features. These changes typically occur as a result of structural work or improvements, annexations resulting in additional flood hazard areas, or corrections of base flood elevations or flood insurance risk zones.

The community's chief executive officer can submit scientific and technical data to the FEMA to support the request for a map revision. The data will be analyzed, and the map will be revised if warranted. The executive officer is afforded a review period for the community to approve the revised map. When base flood elevations are changed, a 90-day review period is provided.

### Who should be contacted in the FEMA to initiate a LOMA, LOMR, or physical map revision?

Request for multiple-lot or multiple-building determinations that do not involve changes to base flood elevations or floodways should be addressed to:

Federal Emergency Management Agency Mitigation Directorate Hazard Identification Branch Washington D.C. 20472

### How long does it take to obtain a LOMA, LOMR, or physical map revision?

For single-building or single-lot determinations that do not involve changes to base flood elevations or floodways, a LOMA or LOMR generally can be issued within four weeks. LOMAs and LOMRs involving multiple lots or multiple buildings require up to eight weeks to process. Times are specified from the date of receipt of all technical, scientific, or legal documentation. LOMRs involving changes to base flood elevations or floodways take approximately 90 days for processing. If changes in flooding conditions are extensive, a physical map revision may be required, which may take 12 months or longer.

# If a LOMA or LOMR is granted and the lender waives the requirement for flood insurance, how can a flood insurance policy be cancelled?

To effect cancellation of a flood insurance policy, the policyholder must supply a copy of the LOMA or LOMR and a waiver for the flood insurance purchase requirement from the lending institution to the insurance agent or broker who services the policy. A completed cancellation form with the LOMA or LOMR must be submitted by the agent to the NFIP or the appropriate Write Your Own company.

When a LOMA or LOMR is issued and cancellation requested, the policyholder may be eligible for a refund of the premium paid for the current policy year only if no claim is pending and no claim has been paid during the current policy year.

# Why is the burden of proof on the person requesting a map change?

Reputable engineering firms are contracted at considerable cost to perform analyses of flood risks and prepare flood maps for the community. The analyses and FIS findings are then reviewed by the FEMA. The FEMA has no justification for changing a study determination without sufficient evidence that a change is appropriate.

# MICHIGAN FLOODPLAIN REGULATORY AUTHORITY FREQUENTLY ASKED QUESTIONS

(Bruce E. Menerey, P.E., Land and Water Management Division, Michigan Department of Environmental Quality)

Each year the Land and Water Management Division (LWMD), Michigan Department of Environmental Quality (MDEQ), receives numerous telephone calls involving questions on floodplains and the NFIP. Many of these "frequently asked questions" have been put onto the "Floodplains" and "National Flood Insurance Program" sections of our website found at <a href="https://www.deq.state.mi/lwm">www.deq.state.mi/lwm</a>.

Following are several of the most frequently asked questions. The answers to other floodplain related questions may be found by accessing our website or by e-mailing your question to: menereyb@state.mi.us.

# What types of activities will require a state floodplain permit?

Any construction, fill, or alteration of a floodplain of a river, stream, or drain which has a drainage area greater than or equal to two square miles will require a state floodplain permit under the State of Michigan's Floodplain Regulatory Authority, found in Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Such projects as building a house, placement of fill, installing a culvert or bridge, material storage, all would require a permit under Part 31.

# Can I build in the floodplain?

In general, construction and fill may be permitted in the portions of the floodplain that are not floodway, provided local ordinance and building standards are met, and all other permit requirements are met. Floodways are the channel of a river or stream and those portions of the floodplain adjoining the channel which are reasonably required to carry and discharge the 100 -year flood; these are areas of moving water during times of flood. New residential construction is specifically prohibited in the floodway.

The state building code requires that residential construction within the 100-year floodplain have the lowest horizontal structural member (bottom of the floor joist or top of the basement floor), elevated above the 100-year flood elevation. Non-residential construction may either be elevated or flood-proofed above the 100-year flood elevation. Some local ordinances have more stringent elevation requirements.

Compensating excavation to maintain flood storage capacity may be required for fill that is placed in the floodplain.

# How do I know if my property/house is in the 100-year floodplain?

There are various sources of floodplain information for your community.

To see if the FEMA has published a floodplain map for your community, contact your community (City, Village, or Township), your local library, the LWMD at 517-335-3181, or the FEMA at 1 -877-336-2627.

The FEMA has not published maps for every community in Michigan. If a floodplain map does not exist for your area, you can contact the LWMD to see if your property is within the 100-year floodplain. To make a determination, the LWMD will need a map showing your property location (preferably with a property legal description), and an estimate as to how high the proposed construction site is above the existing water level of the river, lake, or stream. This information should be mailed/faxed to the appropriate District MDEQ Office. Because of workload, please allow four to eight weeks for such a determination.

# Do I need a state floodplain permit to put an addition onto a house that is in the floodplain?

If the addition will increase the size of the "footprint" of the house, and the addition is in the floodplain, a permit under Part 31 will be required. If the addition will not increase the size of the footprint of the building (such as adding a second story), a permit under Part 31 will not be required. It should be noted that local building codes will require that the addition be elevated above the 100-year flood elevation.

# NEW PUBLICATIONS AVAILABLE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY

Protecting Building Utilities from Flood Damage: Principles and Practices for the Design and Construction of Flood Resistant Building Utility Systems. FEMA 348.1999. 196 pp. Free.

Despite the efforts of governments and private-sector entities to reduce flood hazards, problems still remain with the design and construction of building utilities. This document was prepared to illustrate effective utility design and construction for residential and nonresidential structures located in flood-prone areas in order to assist owners in complying with the NFIP requirements. It covers both new and existing building systems and describes how to repair, replace, or rehabilitate flood-damaged building utility systems, as well as reduce future flood damages. It also contains information on complying with model building codes.

Reducing Flood Losses Through the International Code Series: Meeting the Requirements of the National Flood Insurance Program

This new guidance publication can help you better understand the relationship between the International Building Code (I-Codes) and the NFIP. It includes worksheets, NFIP overview references, crosswalks, an implications overview, and suggested options. It is available on-line at FEMA.gov/library/fldlosses.htm. Hard copies can be obtained for a modest fee from the three-model code groups.

For questions, comments, or information, contact:

George Hosek Michigan Department of Environmental Quality Land and Water Management Division P.O. Box 30458 Lansing, MI 48909-7958

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